

We Claim:

1. A die attach adhesive comprising
 - (a) 5 to 30 weight percent of a mixture of a vinyl ether compound containing polar functionality and an electron acceptor compound,
 - (b) 0.01 to 10.0 weight percent of a free-radical initiator or photoinitiator,
 - (c) 70 to 95 weight percent of a conductive or nonconductive filler, to a total of 100 weight percent,
- 5 in which the vinyl ether has the structure
- 10
 - $$\left[\begin{array}{c} R^3 \\ | \\ R^1-C(=O)-O-Q-X-C(=O)-Y-Z \end{array} \right]_n$$
in which
 - n is 1 to 6;
 - R¹, R², and R³ are hydrogen, methyl or ethyl;
- 15 Q is an alkyl or cycloalkyl linear or branched chain having 1 to 12 carbon atoms; an alkylenoxy chain having 1 to 12 carbon atoms, or aromatic or fused aromatic ring having 3 to 10 carbon atoms and optionally containing the heteroatoms O, N or S;
- 20 X and Y are independently O, NR¹, or S, with the proviso that both X and Y cannot be oxygen or sulfur;

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

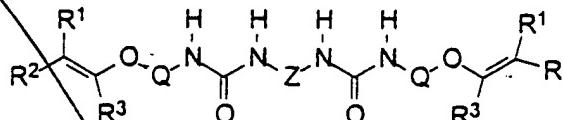
2. The die attach adhesive according to claim 1 in which
 R^1 , R^2 , and R^3 are hydrogen,
Q is a linear or branched chain alkyl having 1 to 12 carbon atoms;
and
5 Z is a linear or branched chain alkyl having up to 36 carbon atoms.

3. The die attach adhesive according to claim 1 in which the filler is a conductive filler.

- 10 4. The die attach adhesive according to claim 3 in which the filler is silver.

5. The die attach adhesive according to claim 1 in which the filler is tetrafluoroethylene.

- 15 6. A vinyl ether compound having the structure:



- 20 in which
 R^1 , R^2 , and R^3 are independently hydrogen, a methyl group, or an ethyl group;

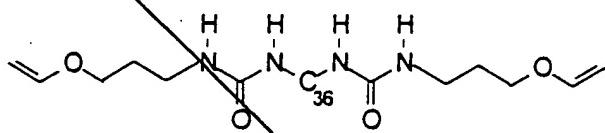
Q is an alkyl or alkylenoxy linear or branched chain having 1 to 12 carbon atoms;

- 25 Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or

~~polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.~~

7. The vinyl ether compound according to claim 5 having the structure

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in which C₃₆ is a mixture of isomers of a 36 carbon linear or branched chain.

8. An adhesive composition containing the vinyl ether compound according to claim 5, a free radical initiator or photoinitiator, and optionally a
10 conductive or nonconductive filler.

A.A. A27